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Substitute for form 1449/PTO

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Sheet

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Complete if known

Application Number	10/749,962
Confirmation Number	2164
Filing Date	December 31, 2003
First Named Inventor	Chandrika Govardhan
Art Unit	1641-1653
Examiner Name	Christine J. Saoud S. Noakes
Attorney Docket Number	Altus-4

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number – Kind Code ² (if known)			
SMN	US-4,342,832		08-03-1982	Goeddel et al.	
	US-4,818,568		03-28-1989	Hamilton, Jr. et al.	
	US-4,917,685		04-17-1990	Viswanathan et al.	
	US-5,633,352		05-27-1997	Dalbøge et al.	
	US-5,654,010		08-05-1997	Johnson et al.	
	US-5,667,808		09-16-1997	Johnson et al.	
	US-5,691,169		11-25-1997	Dalbøge et al.	
	US-5,705,482		01-06-1998	Christensen et al.	
	US-5,734,026		03-31-1998	Florin-Robertsson et al.	
	US-5,780,599		07-14-1998	Junker et al.	
	US-5,788,959		08-04-1998	Singh	
	US-5,849,700		12-15-1998	Sørensen et al.	
	US-5,849,704		12-15-1998	Sørensen et al.	
	US-5,981,485		11-09-1999	O'Conner et al.	
	US-6,022,658		02-08-2000	Sørensen et al.	
	US-6,066,470		05-23-2000	Nishimura et al.	
	US-6,117,984		09-12-2000	Junker et al.	
	US-6,267,981 B1		07-31-2001	Okamoto et al.	
	US-6,309,859 B1		10-30-2001	Nishimura et al.	
	US-6,359,118 B2		03-19-2002	Margolin et al.	
	US-6,378,461 B1		04-12-2002	Igari et al.	
	US-6,448,225 B2		09-10-2002	O'Connor et al.	
	US-6,541,606 B2		04-01-2003	Margolin et al.	
	US-2002/0009491 A1		01-24-2002	Rothbard et al.	
	US-2002/0142050 A1		10-03-2002	Straub et al.	
	US-2003/0013653 A1		01-16-2003	O'Conner et al.	
	US-2003/0099663 A1		05-29-2003	Fleitmann et al.	
	US-2004/0029777 A1		04-09-2003	Ando et al.	

Examiner Signature	/Suzanne Noakes/	Date Considered	7/25/06
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 ** Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ¹ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ² Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST. 16 if possible. ³ Applicant is to place a check mark here if English language translation is attached.

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				Art Unit	Chandrika Govardhan
				Examiner Name	S. Noakes 1653
Sheet	2	of	3	Attorney Docket Number	Altus-4

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Documents	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ¹ - Number ² - Kind Code ³			
SMN		AU 686567	02-12-1998	O'Connor et al.	
		CA 2,086,087	09-14-1999	Junker et al.	
		CA 2,147,482	09-23-2003	Florin-Robertsson et al.	
		EP 0 303 746 A1	02-22-1989	Hamilton, Jr. et al.	
		EP 0 540 582 B1	08-31-1994	Junker et al.	
		EP 0 652 766 B1	11-08-2000	O'Connor et al.	
		EP 0 779 806 B1	11-08-2000	Igari et al.	
		WO 92/00998	01-23-1992	Junker et al.	
		WO 94/03198	02-17-1994	O'Connor et al.	
		WO 95/28174	10-26-1995	Clark et al.	
		WO 96/07397 A2	03-14-1996	Cherif-Cheikh et al.	
		WO 96/07399 A1	03-14-1996	Igari et al.	
		WO 96/21459	07-18-1996	Christensen et al.	
		WO 96/21460	07-18-1996	Christensen et al.	
		WO 97/01331	01-16-1997	Okamoto et al.	
		WO 99/55310	11-04-1999	Margolin et al.	
		WO 01/24822 A2	04-12-2001	Fleitmann et al.	

Examiner Signature	/Suzanne Noakes/	Date Considered	7/25/06
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NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers (s), publisher, city and/or country where published			T ⁶
SMN		BENNANI-BAITI et al., "Physical Linkage of the Human Growth Hormone Gene Cluster and the Skeletal Muscle Sodium Channel α -Subunit Gene (SCN4A) on Chromosome 17," <i>Genomics</i> , 29, 647-652, 1995.			
SMN		CHANTALAT et al., "The Crystal Structure of Wild-Type Growth Hormone at 2.5 Å Resolution," <i>Protein and Peptide Letters</i> , Vol. 2, 333-340, 1995.			

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SMN	CLARK et al., "Long-acting Growth Hormones Produced by Conjugation with Polyethylene Glycol," <i>The Journal of Biological Chemistry</i> , Vol. 271, No. 36, 21969-21977, 1996. CLARKSON et al., "Crystallization and X-ray Data Collection on Human Growth Hormone," <i>Journal of Molecular Biology</i> , Vol. 208, 719-721, 1989. GENENTECH, "Product Information - Nutropin Depot Full Prescribing Information," http://www.gene.com/gene/products/information/opportunistic/nutropin-depot/insert.jsp . 1999 HARO et al., "Divalent Metal Cation Chelators Enhance Chromatographic Separation of Structurally Similar Macromolecules: Separation of Human Growth Hormone Isoforms," <i>Journal of Chromatography B</i> , Vol. 720, 39-47, 1998. HERBERGER et al., "Characterization of Prolease® Human Growth Hormone PLGA Microspheres Produced Using Different Solvents," <i>Proc. Intl. Symp. Controlled Release of Bioactive Materials</i> , Vol. 23, 835-836, 1996. HUMAN GENOME SCIENCES, "Albutropin," http://www.hgsi.com/products/albutropin.html . 2000 JONES et al., "Crystallization of Authentic Recombinant Human Growth Hormone," <i>BioTechnology</i> , Vol. 5, 499-500, 1987. KATAKAM et al., "Controlled Release of Human Growth Hormone in Rats Following Parenteral Administration of Poloxamer Gels," <i>Journal of Controlled Release</i> , Vol. 49(1), 21-26, 1997. KIM et al., "Microencapsulation of Dissociable Human Growth Hormone Aggregates within Poly(D,L-lactic-co-glycolic acid)," <i>International Journal of Pharmaceutics</i> , Vol. 229(1-2), 107-116, 2001. LEWIS et al., "Crystalline Human Growth Hormone," <i>The Journal of the American Chemical Society</i> , Vol. 80, 4429-4430, 1958. MCPPERSON et al., "The Growth and Preliminary Investigation of Protein and Nucleic Acid Crystals for X-Ray Diffraction Analysis," <i>Methods of Biochemical Analysis</i> , Vol. 23, 249-345, 1976. WEBSTER'S New World Dictionary of Science, Lindley and Moore, Eds., Macmillan, New York, New York, 673, 1998. WILHELMI et al., "A New Preparation of Crystalline Anterior Pituitary Growth Hormone," <i>Journal of Biological Chemistry</i> , 176, 735-745, 1948. WU et al., "Application of High-Performance Hydrophobic-Interaction Chromatography to the Characterization of Recombinant DNA-Derived Human Growth Hormone," <i>Journal of Chromatography</i> , 500, 595-606, 1990.	
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Examiner Signature	/Suzanne Noakes/	Date Considered	07/25/2006
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